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**MICROBIOLOGICAL ACTIVITY OF RHIZOSPHERE OF BUCKWHEAT  
BY THE ACTIONS OF BACTERIAL PREPARATIONS OF  
DIAZOBAKTERYN AND REGULATOR OF PLANTS' GROWTH  
RADOSTYM**

The results of studies on the effect of microbiological preparation of Diazobakteryn with different methods of application with growth regulator Radostym on the activity of rhizosphere of bacterial microbiota in the buckwheats sowings. It is established that the application of biological drugs for the treatment of buckwheat seeds before sowing and during the growing season has a positive effect on the activity of rhizosphere biota of crops, however the dependence of the population from the different standards of microbiological drug Diazobakteryn (150, 175, 200 ml) and methods of use of the plant growth regulator of Radostym (seed treatment before sowing – 250 ml/t, spraying of crops – 50 ml/ha). The most effective was the integrated use of drugs: treatment of seeds before sowing by Diazobakteryn and Radostym by the next spraying on this background of crops by Radostym. This contributed to the increasing of the number of rhizospheric bacteria in the buckwheat 28 – 31%, which is caused, on the one hand stimulating effect of the composition of the biological passage in plant physiological and biochemical processes, which improve the development of above-ground biomass and active secretion of root exudates and the formation of branched root system, which provides additional space and substrate for feeding and functioning of the microbiota.

**Key words:** microbiological activity, plant growth regulators, microbiological preparation, buckwheat.